

of the above-identified application pursuant to 37 C.F.R. 121. Such amendment is being made by submission of a replacement paragraph of the Specification for the changes listed below:

In the Specification:

A replacement amended paragraph in clean copy format is enclosed for the text beginning at:

Page 29, line 23.

In addition, pursuant to and in compliance with the requirements of 37 C.F.R. 1.821-1.825, applicants also enclose herewith a second paper form copy of the "Sequence Listing" containing disclosures of nucleotide sequences and/or amino acid sequences. Applicants respectfully request and direct that the enclosed second paper form copy of the "Sequence Listing" containing disclosures of nucleotide sequences and/or amino acid sequences be formally entered into and be made officially of record for the Specification of the above-identified application.

Applicants' undersigned attorney also declares and verifies that this amendment and requested formal entry of the second "Sequence Listing" in paper form copy is proper and correct in all respects; and that the enclosed second "Sequence Listing" in paper copy form is completely supported by the descriptive content and enabling

disclosure of the Specification text originally filed September 2, 1998 as USSN 09/145,916.

Furthermore, applicant's undersigned attorney also declares and verifies that the enclosed second "Sequence Listing" submitted in paper form copy does not contain or include any New Matter; and that a second submission of a computer readable form (CRF) copy of the second "Sequence Listing" is also provided, the second computer readable form (CRF) copy being identical in substantive content to the enclosed second paper form copy.

Accordingly, this second paper form copy "Sequence Listing", is to be formally entered into and made part of the Specification; and the formally entered second paper form copy "Sequence Listings" shall now constitute part of the Specification during the substantive prosecution of this application.

Respectfully submitted,

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1 C. The Cytoplasmic Domain Coding For The Syndecan-4 Peptide

2
3 The third requisite cytoplasmic domain must code for the amino acid
4 residue structure representative of the syndecan-4 core protein. As shown
5 experimentally by the data presented hereinafter, only the syndecan-4 cytoplasmic
6 region and peptide structure allows for functional stimulation of angiogenesis in-
7 situ. For this reason, it is essential and required in each embodiment of the
8 present invention that the third DNA sequence coding for the cytoplasmic domain
9 in the expressed proteoglycan entity in a transfected endothelial cell be
10 representative of and analytically identifiable as the syndecan-4 amino acid residue
11 structure. A representative recitation of the DNA constituting the cytoplasmic
12 domain of the syndecan-4 molecule is presented by Fig. 13 herein.

13 It will be noted and recognized that very little variability and substitution
14 within the specific DNA base sequencing of the cytoplasmic domain of the
15 syndecan-4 molecule is permitted. While some changes are expected, be they
16 point mutations, block substitutions and the like, the expected or envisioned degree
17 of variability which might be present or permitted for the cytoplasmic domain
18 DNA is believed to be quite limited.

19 As representative examples: The last four amino acids (EFYA) cannot be
20 changed or modified. Similarly, regarding the Serine residue at position 181: a
21 mutation to an Alanine residue potentiates activation; while a mutation to
22 Glutamate inhibits cell growth in a dominant fashion (dominant-negative mutation).
23 Finally, the LGKKPIYKK sequences [SEQ ID NO:24] probably cannot be altered at
24
25 all.